

Characteristic	Case n (%)	Control n (%)
Multivessel intervention	4 (7)	5 (9)
Stent procedure	54 (96)	53 (95)
Balloon angioplasty	0	2 (3.6)
DEB	2 (3.6)	1 (2)
Procedural success	56 (100)	56 (100)

Conclusion: Our study showed safety and feasibility of DC PCI in the Indian scenario. However a larger study may be needed to establish the findings.

Immediate and in-hospital complications of percutaneous coronary intervention

Md. Toufiqur Rahman, A.A.S. Majumder, Afzalur Rahman, Mahboob Ali, Abdul Wadud Chowdhury

National Institute of Cardiovascular Diseases, Dhaka, and Dhaka Medical College & Hospital, Bangladesh

Background: Ischemic Heart Disease (IHD) is a major and increasing health care issue in Bangladesh. With the combination of sophisticated equipment, experienced operators, and modern drug therapy, coronary angioplasty has evolved into an effective nonsurgical modality for treating patients with CAD.

Methods: A prospective study was conducted in National Institute of Cardiovascular Diseases (NICVD) Dhaka ; Al-Helal Heart Institute and Hospital, Mirpur Dhaka; Urobangla Heart Hospital, Lal-matia, Dhaka , Lab-Aid Cardiac Hospital, Dhaka and Metropolitan Hospital, Mohakhali, Dhaka from August 2003 to July 2013. A total of 1100 patients underwent coronary angioplasty and stenting. Angioplasty was done as elective & adhoc basis.

Results: Most of the cases are of middle age group. 88% are male. 58% are smokers, 40% hypertensives, 33% have diabetes and 28% are dyslipidemic. 54% had STEMI, 20% had unstable angina, 14% had chronic stable angina. 75% had single vessel disease, 20% had double vessel diseases, 5% had triple vessel diseases. 90 patients had total occlusion. 47 % had lesion in LAD, 33% had lesion in RCA, 12% had lesion in LCX. In most of the indicated cases PCI was done efficiently with very minimum rate of failure & complications. In hospital mortality was only 1.6% with 0.8% periprocedure MI - due to sub acute stent thrombosis.

Conclusion: In the field of management of coronary artery disease percutaneous coronary intervention (PCI) is the internationally recognized standard treatment worldwide for more than last 3 decades. Our result of PCI correlates well with the other studies worldwide, though the study population is not big enough & there are many lacks of logistics in our country. Complications during and in-hospital period are very few.

Clinical profile and outcomes of patients who underwent small vessel coronary stenting using drug eluting stents

M. Vijay Balaji, V. Nandhakumar, S. Vijaya Kumar, Suma M. Victor, U. Kalaichelvan, P. Balaji, S.R. RamKumar, K. Jai Shankar, J. Ezhilan, Ulhas M. Pandurangi, K. Latchumanadhas, Mullasari S. Ajit

Institute of Cardiovascular Diseases, The Madras Medical Mission, Chennai, India

Background: Small vessel coronary stenting constitutes 30% to 50% of all Percutaneous Coronary Interventions (PCI) worldwide. Small vessel coronary artery disease is common among Diabetics and smokers.

Methods: We studied 75 patients who underwent small vessel coronary stenting with Drug eluting stents (DES) of < 2.5 mm in our institution from January 2013 to January 2014. Demographic profile, risk factor profile, angiographic details, early (1 month) and late (6 months) outcomes of the patients were analysed.

Results: Most of them were males between 40 to 50 years of age. 77.3% had Diabetes mellitus, 64% had Hypertension, 82.7% had Dyslipidemia and 68% were smokers. ST elevation myocardial infarction was the commonest clinical presentation (70%) followed by Non ST elevation myocardial infarction (23%) and chronic stable angina (7%).

Angiographically most of the lesions were Type B lesions. LAD was the commonest vessel addressed (64%) followed by RCA and LCX. 46% of all patients had Double vessel disease. 53% of patients had proximal segment lesions, 38% had mid segment lesions and the rest had distal lesions.

60% of the patients received Everolimus-eluting stents and 40% received Zotarolimus-eluting stents.

Early (1 month) outcome analysis revealed a MACE rate of 2.6% (2 out of 75 patients had Sub acute thrombosis). Late (6 month) outcome analysis revealed a MACE rate of 4% (3 out of 75 patients developed In-stent restenosis requiring repeat revascularisation).

Conclusion: Diabetes is the commonest risk factor for small vessel coronary artery disease. Even though Coronary Artery Bypass Grafting was the preferred mode of revascularisation for such patients in the past, our study revealed that PCI using third generation DES is a safe and feasible alternative mode of revascularisation.

Operational utility of fractional flow reserve (FFR) in guiding the decision for coronary revascularization in patients of coronary artery disease in Indian scenario

Vikram Singh, Rajiv Agarwal, Sanjiv Sharma, Ram Deo Yadave, Sunil Wadhwa, Brijesh Shrivastava, Pankaj Batra

Batra Hospital and Medical Research Centre, New Delhi, India

Background: Fractional flow reserve (FFR) is now well established as a simple and reliable technique for assessing the functional severity of coronary stenosis and guiding the decision for revascularization. The operational utility of FFR will depend on the frequency with which the addition of FFR data changes the revascularization decision based on conventional criteria alone.

Methods: We enrolled 40 patients with coronary lesions of intermediate/uncertain severity whose revascularization decision remained ambiguous as assessed by the primary operator after clinical and non-invasive data (TMT, DSE, stress MIBI) and coronary angiography.

All lesions with diagnostic uncertainty were subjected to FFR. Intracoronary bolus adenosine (80-100 µg) was administered to induce maximum hyperaemia, and FFR was estimated with 0.014 inch sensor tipped Pressure Wire Certus™ (St. Jude Medical) attached with St Jude Medical Radi Analyser TM Xpress – 12711 – SN- 3249. Coronary lesions were considered significant at $FFR \leq 0.8$. **Results:** Forty patients were enrolled for the study, with 79.3% males. 58 coronary lesions were found to be of intermediate/